

Replica Wright flyers grace Centennial of Military Flight celebration

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As part of the Foulois Centennial of Military Flight celebration March 2 at MacArthur Parade Field, two authentic-looking Wright "B" Flyers are going to make an appearance.

Wright "B" Flyer Inc., an all-volunteer, not-for-profit corporation that designs, builds and maintains the flyers, is sending their "Yellow Bird" and "Brown Bird," to Fort Sam Houston from Dayton, Ohio.

When the "Yellow Bird" arrives at Fort Sam Houston Feb. 25, it will be assembled inside a hanger shelter, just as Lt. Benjamin D. Foulois did 100 years ago. The "Brown Bird" will also arrive Feb. 25 at Stinson Airport, awaiting its flyover during the celebration.

"The plane we will be flying was completed in 1982. It is a 'look-alike' of a modified Wright "B" Flyer that is on exhibit in the National Museum of the United States Air Force," said Mitchell Cary, president of the Wright "B" Flyer Inc.

"Certain concessions were made to make the plane safer. It is not intended to be a replica; only to look like the Wright "B" Flyer. The plane that will be on the ground at the parade grounds is a much more authentic replica of the Wright "B" Flyer," he said.

"The plane that Benjamin Foulois first flew March 2, 1910 was the Wright Military Flyer," Cary said.

The U.S. Army purchased the Wright Military Flyer, designating it Signal Corps Airplane No. 1, for the price of \$30,000. The original price was \$25,000 with 10 percent added for each full mile per hour of speed over the Army's requirement of 40 mph.

To establish the speed of the airplane, a course was set from Fort Meyer, Va., to Shooter's Hill in Alexandria, Va., on July 30, 1909. Orville Wright and Foulois made the 10-mile flight with an average speed of 42.5 mph, earning the Wright Brothers a \$5,000 bonus for flying two miles per hour over the required 40 mph.

The original Signal Corps Airplane No. 1 was a two-place, wire-braced biplane with a four-cylinder Wright 30.6 horsepower engine driving two wooden propellers via a sprocket-and-chain transmission system.

According to the Smithsonian National Air and Space Museum Web site: (<http://www.nasm.si.edu>) Signal Corps Airplane No. 1 was 29 feet, 2 inches in length; 8 feet, 2 inches high and weighed 735 pounds, with a wingspan of 36 feet, 8 inches.

After the Army took possession of the airplane, flight training began in College Park, Md. However, because the winter weather in Maryland was unsuitable for flying, the Signal Corps ordered the airplane sent to Fort Sam Houston in November 1909.

Foulois and the Signal Corps crew were responsible for daily and periodic maintenance and upkeep of the engine and airframe of the aircraft.

"As (Foulois) began flying the plane throughout 1910 he made modifica-

tions to the plane and by the end of the year it very closely resembled the 1910 Wright "B" Flyer," Cary said.

Beyond the basic maintenance of the airplane, Foulois and his crew made two significant modifications to Signal Corps Airplane No. 1.

After consulting with the Wright brothers, Foulois and his crew moved one of the elevators from the front to the rear of the airplane, in an effort to stop the its tendency to buck.

The elevators are a pair of movable wings, controlled by the pilot.

They also designed and built a three-wheel landing gear similar to that used on Curtiss airplanes. According to <http://www.centennialof-flight.gov> Glenn Curtiss and Alexander Graham Bell founded the Aerial Experiment Association in 1907, which designed and built several aircraft.

Though successful, the modification was not completely satisfactory. The Wright brothers developed a similar system using pneumatic tires attached

to the landing skids with elastic cord to absorb the landing shock. The Wrights' later supplied that system to Foulois, which he then installed on Signal Corps Airplane No. 1.

The Army retired Signal Corps Airplane No. 1 in March 1911.

The aircraft was sent to the Wright factory in Dayton, Ohio for refurbishing and then onto the Smithsonian Institution in Washington, D.C. where it remains on display today at the National Air and Space Museum.

According to the NASM Web site, the War Department approved the transfer on May 4, 1911. The aircraft was restored close to its original 1909 configuration, but a few non-original braces added for the wheeled landing gear in 1910 remained on the airplane.

Apart from minor repairs, the airplane remains untouched since its acquisition in 1911.

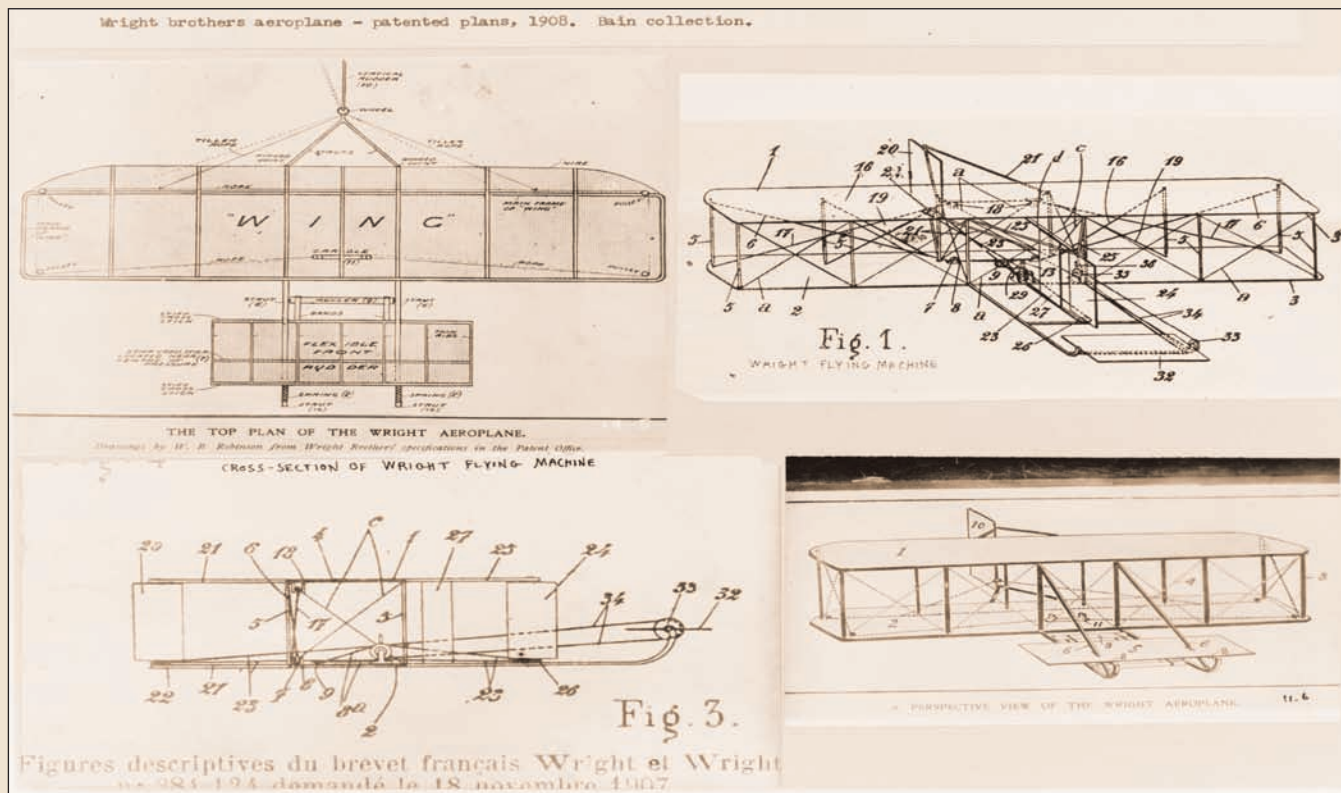


Photo courtesy Library of Congress

An image of the original drawings by W.B. Robinson of specifications for the 1909 Wright Military Flyer submitted to the U.S. Patent Office.